



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/510,372

04/14/2005

Florian Straub

1004501-000789

8782

21839 7590 02/01/2010
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

OKEKE, IZUNNA

ART UNIT

PAPER NUMBER

2432

NOTIFICATION DATE

DELIVERY MODE

02/01/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
offserv@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/510,372	STRAUB ET AL.	
	Examiner	Art Unit	
	IZUNNA OKEKE	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-17,19-22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-17,19-22 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-2, 4-17, 19-22 and 24-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-12, 14-17, 19-22 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO-0172012), and further in view of Bird et al (US-5148479).

- a. *Referring to claim 1, 16 and 21:*

Regarding claim 1 and similar claims 16 and 21, Hanna teaches a method for remotely controlling and/or regulating at least one system, comprising: generating a validation code having a limited period of validity, the validation code being variably generated to be valid only once for a communication to be dispatched (Hanna, Page 7, Line18-24.... Authentication value as the validation code), combining information relating to the system and the validation code in accordance with a first combination rule (Page 7, Line 18-24.... combining information relating to the device together with the authentication value and transmitting to the controller), dispatching the communication by a communication device assigned to the system, the communication comprising the information relating to the system, the validation code, and the validity information (Page 7, Line 18-24.... combining information relating to the device

Art Unit: 2432

together with the authentication value and transmitting to the controller), and processing a message which the communication device receives after the communication has been dispatched, the processing comprising:

extracting a check code from the message according to a first extraction rule (Page 7, Line 16-18... extracting a check authentication value from the message received from the controller), checking whether the message originates from a receiver of the communication based on the validation code and the check code (Page 7, Line 16-18... authenticating the controller using the authentication value in the message sent by the controller).

Hanna teaches a method of regulating communication between a remote device controller and a device wherein the device sends a hash of a message and an authentication value to the device controller (Page 7, Line 19-25), the message indication an operating information of the device.

The device controller receives the transmission and using the authentication value, returns a message to the device. The device verifies if the message originates from the device controller by checking the authentication value before executing the instructions in the message (Page 7, Line 19-26). Hanna's method of authenticating a sender and a message uses a pre-stored authentication value which is established between the sender and the receiver.

Hanna does not disclose the authentication value as a random nonce which is valid one for a limited period. However, challenge methods for authenticating a party in a communication using a random nonce is well known in the art. For example, Bird teaches a much stronger method of authenticating communications between a sender and receiver using a challenge response nonce wherein the nonce is generated once for every communication and sent with the message to a receiving party, the receiving party generates a message using the nonce and returns

Art Unit: 2432

it to the sending party which verifies the message and the receiving party if the nonce used in the communication match (See Bird, Col 6, line 16-58). Therefore, one of ordinary skill will be motivated to modify Hanna's authentication value to be a random number which is valid once for every communication as used in Bird's communication system for the purpose of verifying the authenticity of a party which receives and send a message by ensuring that the message was not compromised or intercepted by a third party.

a. Referring to claim 2, 17 and 22:

Regarding claim 2 and similar claims 17 and 22, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the adding of the validity information to the validation code comprises appending or prefixing the validity information to the validation code (See Bird, Col 3, Line 27-30... freshly generated nonce which is valid once for every communication).

a. Referring to claim 4, 19 and 24:

Regarding claim 4 and similar claims 19 and 24, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the validation code is generated by a random number generator (See Bird, Col 6, Line 26-27).

a. Referring to claim 5, 6, 7 and 12:

Regarding claim 5 and similar claims 6, 7 and 12, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the validity information is directly added to the validation code (See the rejection in claim 1... nonce validity), in the dispatching, the validation code is transmitted in an encrypted form, and after a decryption of the message or check code in the communications device, making the validity information available in plain

Art Unit: 2432

text, wherein the validity information is not stored in the communication device (See Hanna, Page 10, Line 13-20... encrypting the authentication value and decrypting the authentication value when it is received).

a. Referring to amended claim 8, 20, 25:

Regarding amended claim 8 and similar claims 20 and 25, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the receiver of the communication adds, in accordance with a third combination rule, a dispatcher information to the message which he generates (See Hanna, Page 10, Line 16-20 teaches a communication from the controller to the device comprising a dispatcher information such as a model number together with the information),

the dispatcher information is extracted from the message in accordance with a third extraction rule, the dispatcher is identified by means of the dispatcher information and stored dispatcher data, only if the checking, as to whether the message originates from a receiver of the communication, is successful and if the identification of the dispatcher is successful, an instruction information is implemented by the system, after the check code and dispatcher information have been extracted from the message, and if the checking and/or the identification of the dispatcher were/was not successful, the instruction information is ignored (See Hanna, Page 14, Line 9-22 teaches extracting the values in the message received from the controller, verifying the authenticity of the sender and utilizing the message contained in the communication if the sender is verified to be accurate).

a. Referring to claim 9:

Art Unit: 2432

Regarding claim 9 the combination of Hanna and Bird teaches the method as claimed in claim 8, wherein - the dispatcher information contains a secret password or a secret identification number (See Hanna, Page 10, Line 16-20).

a. Referring to claim 10:

Regarding claim 10, the combination of Hanna and Bird teaches the method as claimed in claim 8, wherein the dispatcher information is transmitted in encrypted form (See Hanna, Page 10, Line 16-21 teaches encrypting the information).

a. Referring to claim 11:

Regarding claim 11, the combination of Hanna and Bird teaches the method as claimed in claim 8, wherein the dispatcher information itself is encrypted before it is added to the message in accordance with a third combination rule (See Hanna, Page 10, Line 16-21).

a. Referring to claim 14:

Regarding claim 14, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the message is received via Internet (See Hanna, Page 10, Line 5-11 teaches communication received over the internet).

a. Referring to claim 15:

Regarding claim 15, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein when the communication is dispatched, a copy of the validation code is stored so that it is available for the comparison when a message is received later, and the validity information is stored together with the validation code (See Hanna, Page 12, Line 14-17 teaches storing the authentication value received from the communication).

a. Referring to claim 26, 27 and 28:

Art Unit: 2432

Regarding claim 26 and similar claims 27 and 28, the combination of Hanna and Bird teaches the method as claimed in claim 1, wherein the at least one system comprises an industrial system (See Hanna, Col 6, Line 9-14).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012) and Bird et al (US-5148479), and further in view of Silen et al. (US-2002/0045442).

a. Referring to claim 13:

Regarding claim 13, the combination of Hanna and Bird teaches the method as claimed in claim 1 wherein the communication is dispatched or received from one system to another (See Hanna, Page 6 and 7).

Hanna and Bird does not teach communication and/or the message are dispatched and/or received by means of short message service.

However, Silen teaches a communication and/or the message are dispatched and/or received by means of short message service (See Silen, Abstract)

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna and Bird's means of dispatching and receiving control communications as a short message service as taught by Silen for the purpose of expanding the devices used in controlling the system such as the use of a mobile device from any location to control the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571)270-3854.

The examiner can normally be reached on 9:00am - 5:00pm.

Art Unit: 2432

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. O./

Examiner, Art Unit 2432

/Jung Kim/

Primary Examiner, AU 2432